

# Quality and Safety Series

## Process Mapping and Analysis

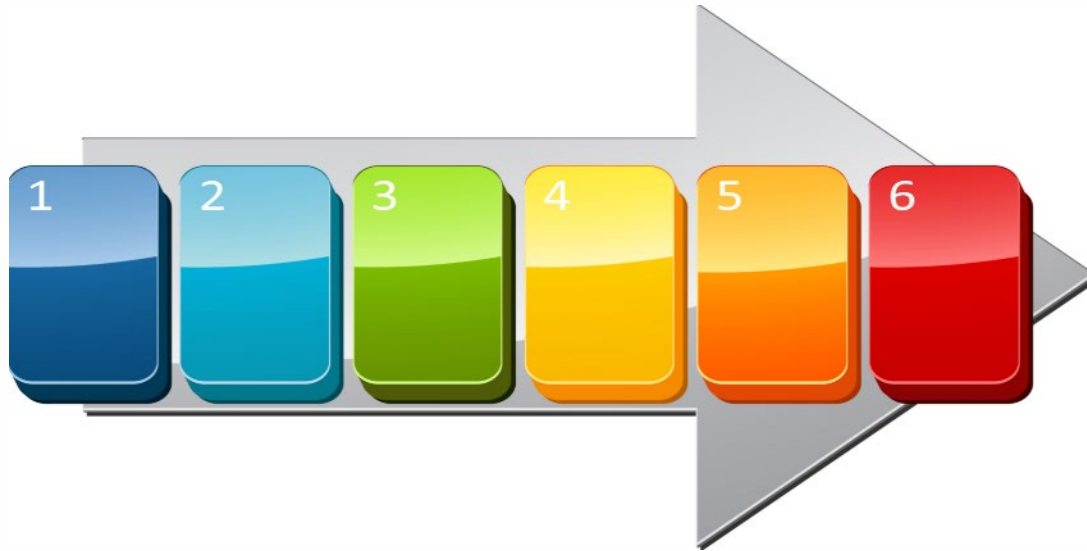
# OBJECTIVES

- Define what a process is and what process mapping entails.
- Explore the uses and benefits of process mapping.
- Identify the various types of process maps.
- Discuss the steps in creating a process map.



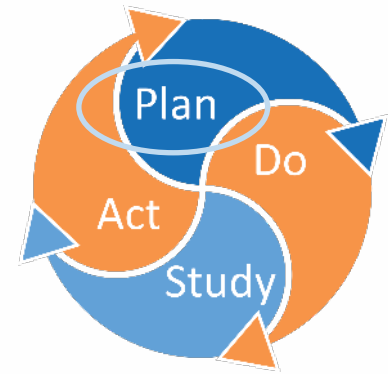
# What Is a Process?

- A process is a series of steps or activities that achieve a particular result.
- A process is a set of common tasks to create a product or service.



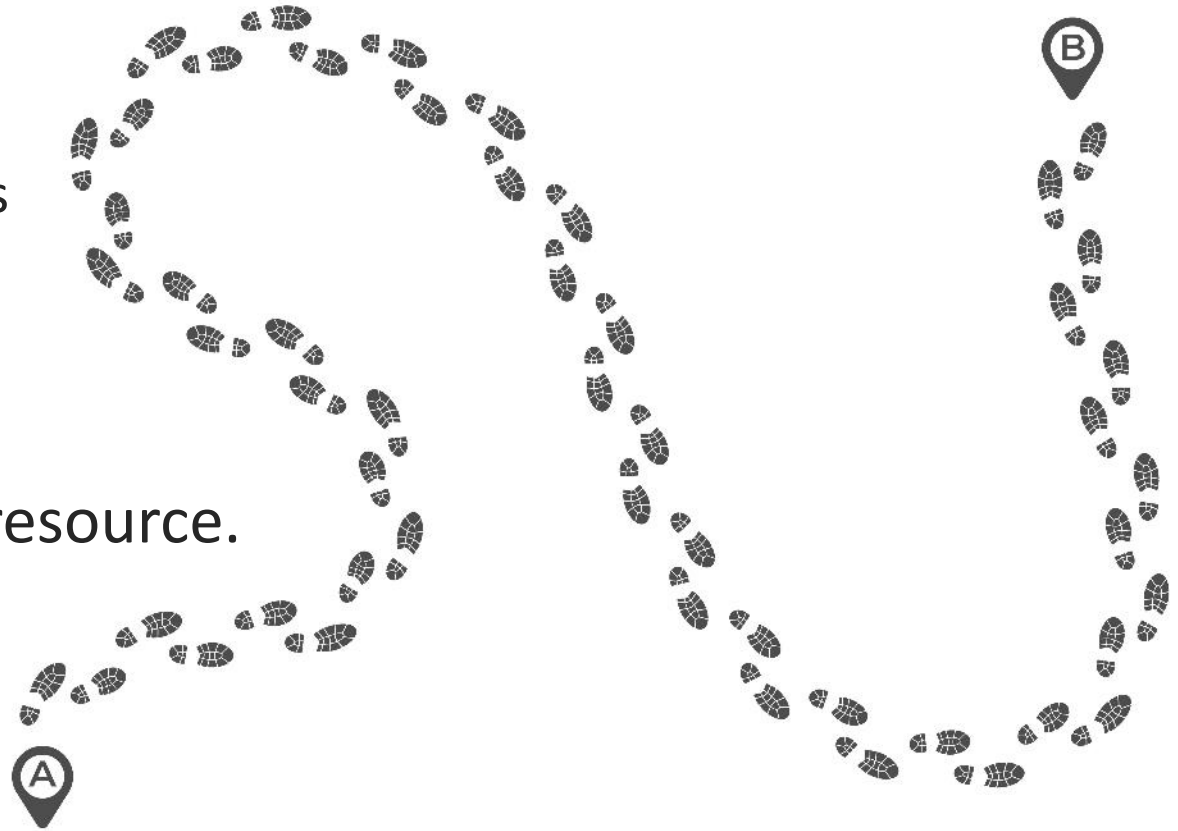
# Process Mapping

- Process mapping is a graphic representation of steps to create a product or service.
- Process mapping uses shapes to represent each step of a process.
- It is part of “define” in DMAIC,<sup>1</sup> and part of “plan” in PDSA.<sup>2</sup>
- Complete your process mapping as a group.
- Include representatives who know each step.



# Benefits of Process Mapping

- Provides a singular overview of a process to gain understanding.
- Detects waste.
  - Value-added steps
  - Non-value-added steps
- Improves quality and efficiency.
- Serves as a training resource.
  - How a process should be completed



# Types of Process Maps

- **Current State:** Represents the process as it exists.
- **Future State:** Represents the optimized process.
- **High-Level:** Includes the basic steps.
- **Detailed:** Includes every step.
- **Swimlane/Deployment:** Divides the process by person or department.
- **Value Stream:** Looks at value-added and non-value-added steps to create a “lean” process.

# Steps for Process Mapping



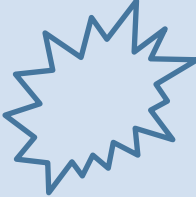




# Creating a Process Map

## Steps

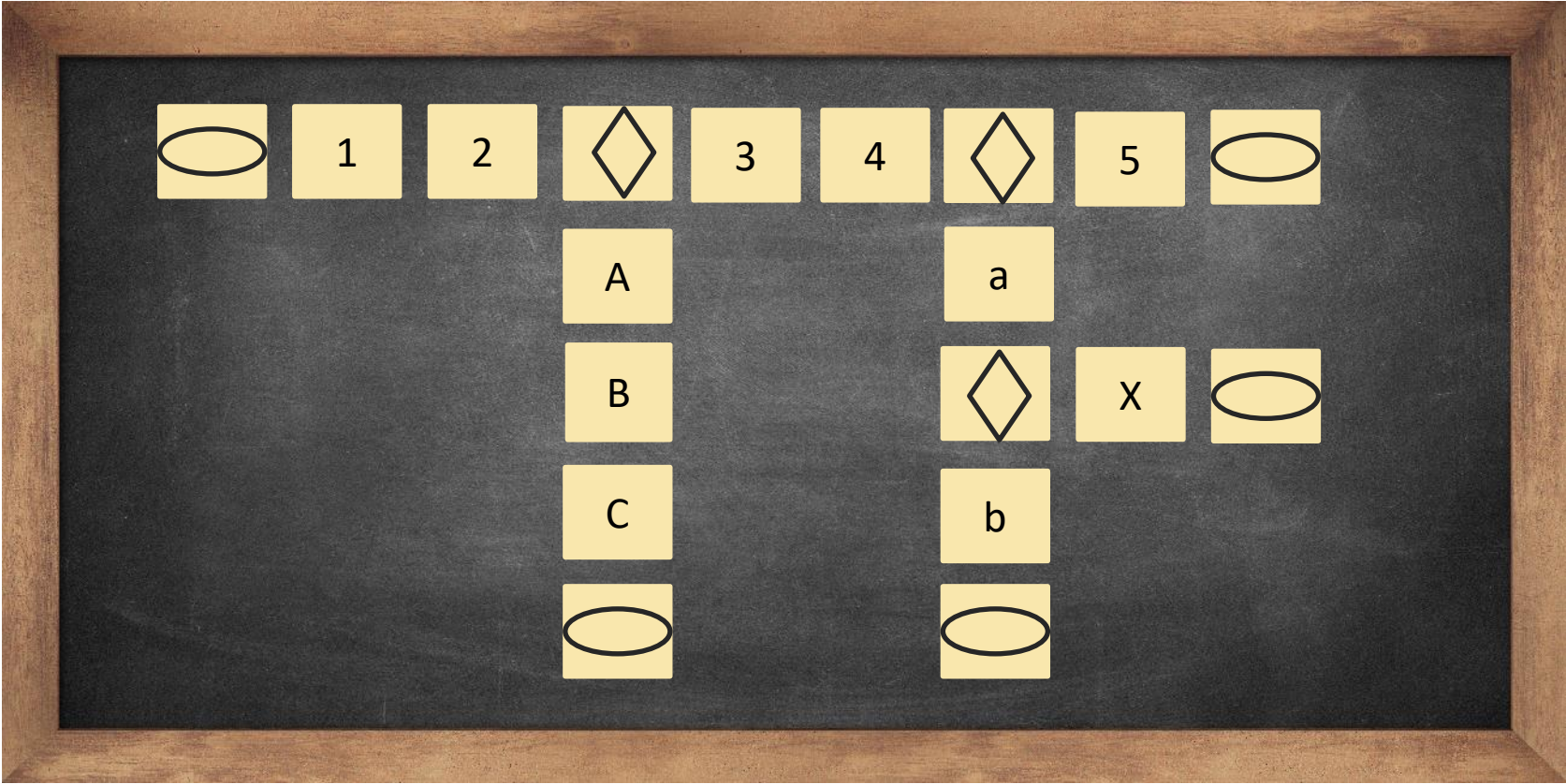
1. Set boundaries.
2. Determine start and stop.
3. Identify all individual steps.
4. Arrange steps in order.
5. Discuss results.
6. Upon completion, number the steps.
7. Transfer the completed map to computer with date and participant names.

## Shapes Used

Shape	Meaning
	Process step
	Decisions
	Interruption to process flow
	Beginning or end
	Directional flow



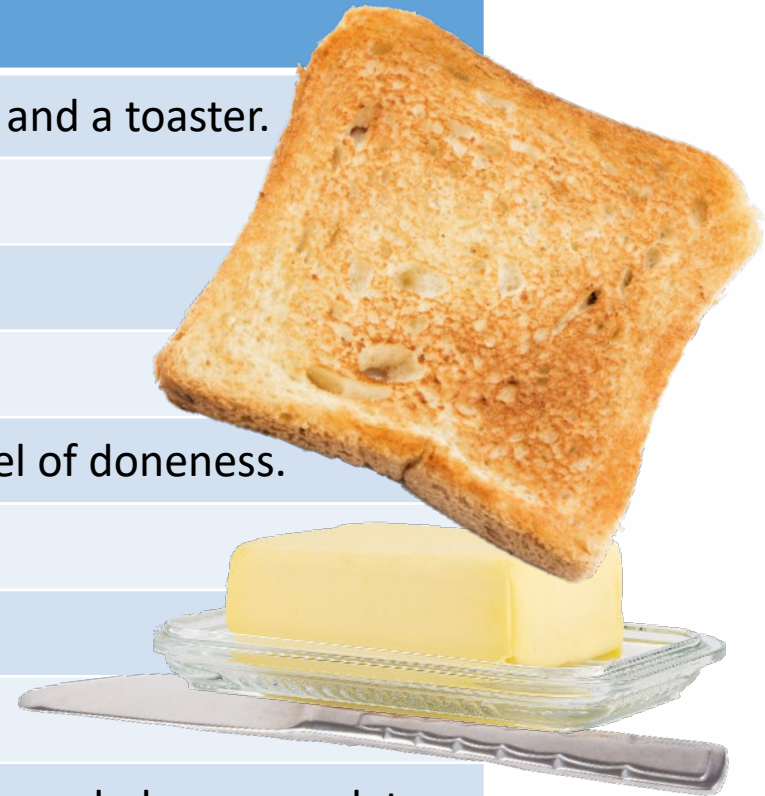
# Suggestion: Use Sticky Notes



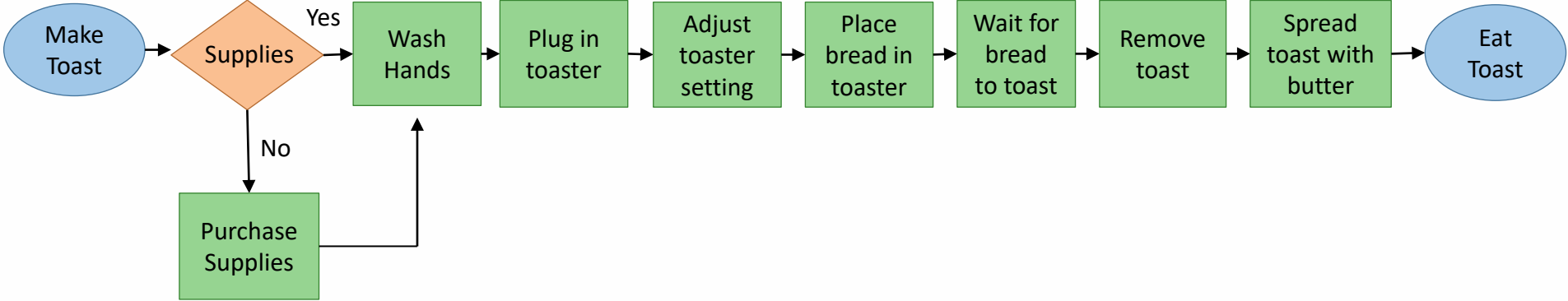
Use sticky notes to make it easier to change and adjust your process steps with your team.

# Process for Making Buttered Toast

Step	Definition
1	Check to see if there is bread, butter, a knife, and a toaster.
2	Purchase any missing supplies.
3	Wash your hands.
4	Ensure the toaster is plugged in.
5	Adjust the toaster setting to your desired level of doneness.
6	Put a slice of bread in the toaster.
7	Turn on the toaster.
8	Wait for the bread to toast.
9	When toast is ready, remove from the toaster, and place on a plate.
10	Use a knife to cut a pat of butter and spread on the toast.



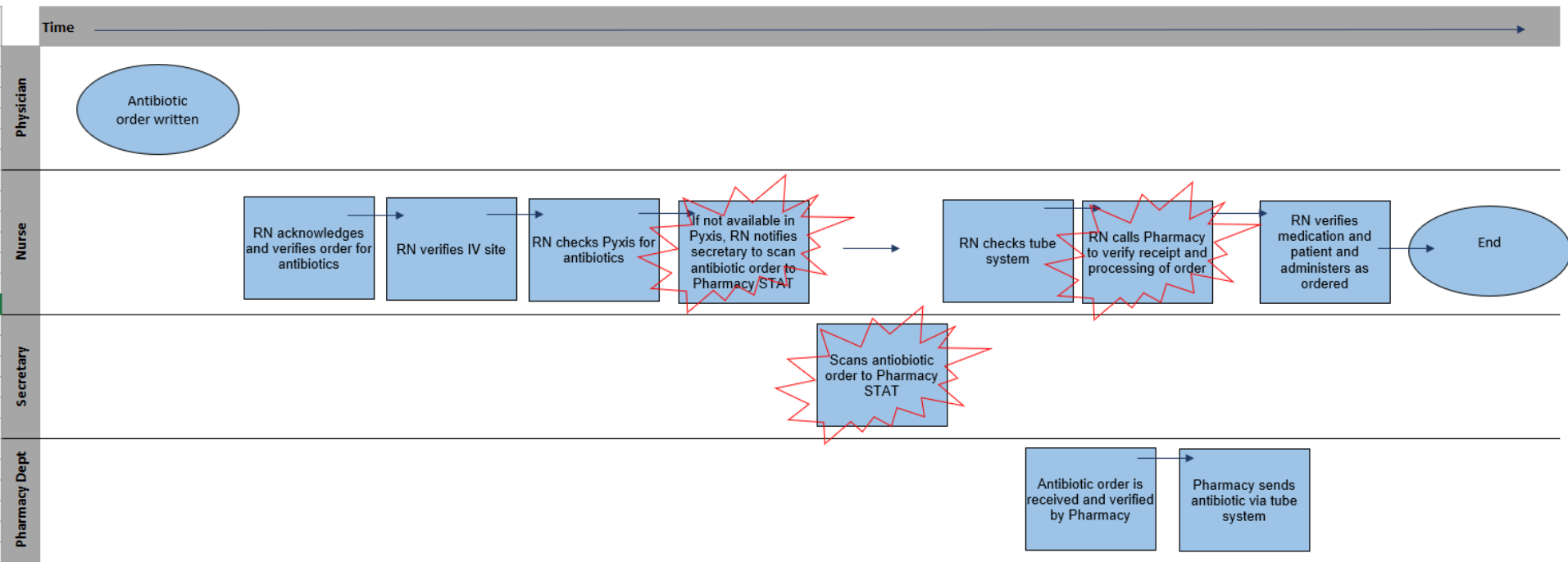
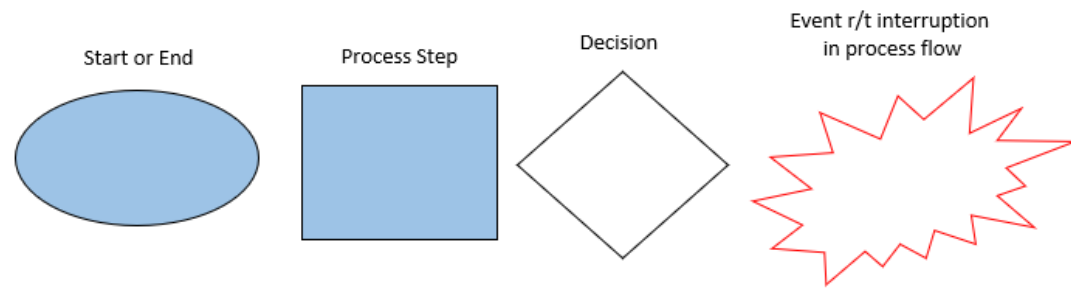
# Process Map for Making Buttered Toast



# Swim Lane: Who Does Each Step?

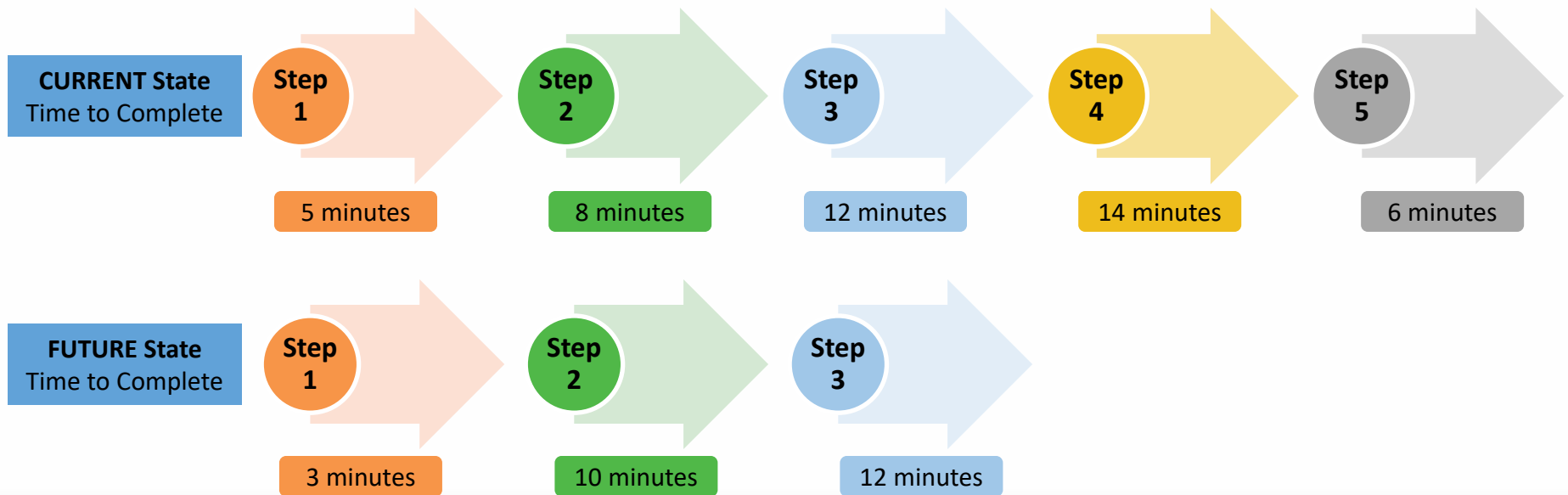
## Tailored Antibiotics for Sepsis

- Shows who does each step.
- Roles are on the left.
- Time is across the top.
- Use flow chart symbols as appropriate.



# Value Stream Map: Process Efficiency

- Lean thinking
- Current state and future state
- Value-added and non-value-added steps
- Used for process flows, like emergency department throughput or operating room turnover



# Key Take-Aways

- Process mapping is a graphic representation of steps within a process.
- Process mapping assists in making processes “lean” and efficient.
- There are several variations of process maps.
- Best results are achieved if mapping is done in a group setting.
- The group should be representative of those with direct knowledge of the process.





# Thank you!

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